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ABSTRACT

This report is derived from narrative reports for fiscal year 1971 submitted to the U.S. Office of Education by each State department of education. Under Title III of the National Defense Education Act, the Federal government provides matching funds to each State to strengthen instruction in 12 major academic subjects. During fiscal year 1971 the Office of Education developed a management by objectives system to achieve more efficient use of Title III funds by individual States, and each State submitted a new State plan for better management of its Title III programs. Each of these activities is described in separate sections of the report. In addition, the report describes a few exemplary projects utilizing Title III funds and summarizes procedures for assessing each State's educational needs and administering the expenditure of Title III funds. Four tables provide a detailed breakdown of each State's expenditures under Title III in fiscal 1971, and another table lists total Title III expenditures for 1959-71. (Author/JG)

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Strengthening Instruction in Academic Subjects

Title III, National Defense Education Act
As Amended, Annual Report
Fiscal Year 1971

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1. INTRODUCTION

Fiscal year 1971 was the 13th year in which the title III, National Defense Education Act (NDEA), program supported the improvement of instruction in academic subjects taught in elementary and secondary schools through the purchase of equipment, materials, and minor remodeling, and through supervisory and related services provided by State departments of education. The program provides matching funds to strengthen instruction in 12 academic subjects: the arts, civics, economics, English, geography, history, the humanities, industrial arts, mathematics, modern foreign languages, reading, and science.

Beginning in 1968, funds totaling $5.5 million for supervisory and related services were deleted from the NDEA title III appropriation and added to that of title V of the Elementary and Secondary Education Act (grants to strengthen State departments of education). Administration of NDEA title III continued to be funded through an appropriation of $2 million in fiscal years 1968-71.

The allotments to States under NDEA title III for fiscal years 1959-71 are tabulated on the following page.

NDEA title III is a matching program. The Federal share is up to one-half of the expenditures for acquisition of equipment, materials, and minor remodeling, and for administration of the State plan.

The loan program provides funds at a reduced rate of interest to private nonprofit schools for the same purposes as the acquisitions program for

public schools - strengthening instruction through equipment, materials, and minor remodeling. For fiscal year 1971, the interest rate was 8 percent.

Allotments for equipment, materials, minor remodeling; administration of the State plan; and loan programs under NDEA title III: fiscal years 1959-71

Fiscal year	Equipment materials, minor remodeling	Administration of the State plan	Loan program
1959	$49,280,000	$1,350,000	$ 6,720,000
1960	52,800,000	4,000,000	7,200,000
1961	47,520,000	3,750,000	6,480,000
1962	47,520,000	3,750,000	6,480,000
1963	47,520,000	3,750,000	6,480,000
1964	42,512,952	3,365,070	6,480,000
1965	69,992,500	4,619,215	9,600,000
1966	78,637,010	6,831,163	10,800,000
1967	79,200,000	8,980,000	10,800,000
1968	75,240,000	2,000,000 1/	1,000,000
1969	75,240,000	2,000,000	1,000,000 2/
1970	34,679,000	2,000,000	500,000
1971	47,500,000	2,000,000	500,000

1/ Until fiscal year 1968, State supervisory and related services were supported in addition to administration.

2/ Beginning in 1969, the loan program funds were no longer allotted by States but administered as a total amount for the United States.

This report for fiscal year 1971 is derived from the narrative reports submitted by each State department of education to the U.S. Office of Education.

The administration of the NDEA title III program entered a new phase in fiscal year 1971. States began operating the program through a new State plan, a list of assurances drawn from the statute. The new State plan format was developed by the Federal Assistance Streamlining Task Force (FAST) and was intended to make management of the program more efficient through reduction of paper-work. Plans were approved during the year for 50 States, American Samoa, the District of Columbia, Guam, Puerto Rico, the Trust Territory of the Pacific Islands, Virgin Islands, and Bureau of Indian Affairs.

A second change, which had great impact on the effectiveness of the program, was establishment of a management-by-objectives system. The Office of Education, with help from the States, developed a Program and Operational Procedures manual. The manual includes an explanation and examples of assessing instructional and equipment needs, developing goals and objectives, setting priorities, planning activities, and measuring results to achieve more effective use of funds for improving instruction through equipment and materials.

In 1970 and 1971, the Office of Education sponsored workshops and a series of regional conferences to inform State departments of education about, and receive their assistance in, refining regulations, forms, and the Program

and Operational Procedures manual. States then planned their own management-by-objectives system and assisted local education agencies in applying the system to project development. All States had begun conversion to the new system by the beginning of fiscal year 1972.

2. MANAGEMENT BY OBJECTIVES

Two types of objectives were developed in fiscal year 1971 by State education agencies: program and management.

Program objectives deal with accomplishment of the purpose of the Act. Examples are (1) increasing the number of students able to take laboratory science during the year, (2) adding equipment and material enabling a certain number of schools to increase their offerings in foreign languages, and (3) raising the number and quality of items of equipment and materials to a specified standard.

Management objectives, on the other hand, are intended to help accomplish the administration of the Act. Regulatory, service, and leadership activities designed to help local education agencies achieve their program objectives are included in this category. The activities generally are concerned with such functions as project development, review, monitoring, and reporting. Other functions are planning and evaluation, information systems, and financial management.

Objectives developed by State departments of education sometimes overlap program and management types. Of the statements of objectives reported for 1971, the largest number (75 percent) were in management.

Management objectives included such matters as:

a. Assisting local education agencies in performing needs assessments
b. Developing better plans, programs, and evaluation systems
c. Developing data management systems
d. Aiding local education agencies in management-by-objectives techniques
e. Simplifying application procedures
f. Providing inservice training and workshops for teachers
g. Disseminating information about NDEA III and successful projects.

Program objectives dealt with matters such as:

a. Developing minimum State standards
b. Increasing quantity and quality of equipment and materials
c. Supporting special and experimental programs
d. Emphasizing individualized instruction
e. Improving instruction in the academic subject areas.

The objectives fell into four general categories, three of which were management and one program. In the first, a few States developed objectives that tended to simplify the application procedures for local education agencies. One State mentioned the testing, on a pilot basis, of a consolidated application form. Another State indicated that it was developing a project application review process designed to decrease the time required for the evaluation and approval or rejection of applications submitted by local education agencies.

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Another area with which the objectives dealt was that of financing the program. These objectives were concerned with financial assistance to local education agencies on a matching basis. One State was trying to ensure equitable educational opportunity through allocation of matching funds on the basis of student needs. Another State intended to distribute 80 percent of its NDEA title III allotment on a per pupil basis. The remaining 20 percent would be distributed for special acquisition projects.

A third State similarly indicated that up to 40 percent of the Federal and State funds available would be distributed to the applicant agencies for standard projects on a per capita matching basis. The remaining 60 percent would be open to all districts and eligible applicants and would be matching funds for special projects.

A third general category was leadership. Examples of this are (1) offering consultative services to local education agencies, (2) helping to establish minimum statewide standards for the purchase of equipment and materials, (3) aiding the local education agencies in writing measurable or behavioral objectives, (4) setting up management by objectives systems, and (5) urging local education agencies to participate in the NDEA title III program. The States also encouraged local education agencies to develop model, experimental or innovative projects or proposals and offered their assistance in such projects. Most States, therefore, assumed the leadership role in promoting improvement and expansion in the academic subject areas.

A fourth category focused on program objectives to strengthen instruction in academic subjects by providing funds for the acquisition of instructional

equipment and materials. In setting minimum standards, one State reported a three-phase plan for obtaining equipment and materials.

Category	Phase I	Phase II	Phase III
Books	At least 6,000 volumes representing 6,000 titles or 10 books per pupil, whichever is greater.	8,000 volumes representing at least 6,000 titles or 12 books per pupil, whichever is greater.	10,000 volumes representing at least 8,000 titles or 15 books per pupil, whichever is greater.
Filmstrips	500 titles or 1 print per pupil, whichever is greater.	750 titles representing 1,000 prints or 2 prints per pupil, whichever is greater.	1,000 titles representing 1,500 prints or 3 prints per pupil, whichever is greater.
16mm Projectors	1 per 10 teaching stations or 1 per floor plus 1 in media center.	1 per 4 teaching stations plus 2 in media center.	1 per 2 teaching stations plus 5 in media center.
T.V. (Minimum 23-inch Screen)	1 per floor on cart and classrooms equipped with antenna lead-in.	1 per teaching station where programs available.	1 per 24 pupils plus 1.
Video Tape Recorders	Accessible for experimentation.	Available in school district.	1 per building.

In the area of modern foreign languages, one State considered these items as minimal to support instruction:

1. Globes (target language text only): 1 per classroom.
2. Maps (target language area and text only): 1 per classroom.
3. Charts (target language text only): 1 per 3 classrooms.
4. Games: 1 per title per classroom.
5. Photos: 1 set per language.

6. Posters: 1 set per language per classroom if component of basic text material; 1 set per language per 3 classrooms if supplemental.
7. Flags (appropriate to target language): 1 per classroom.
8. Storage facilities for NDEA title III equipment (certification required).

Another State established adequacy standards for instructional levels; e.g.:

Level 1: base minimum -- textbooks, library books, science equipment, maps, globes, etc.

Level 2: audiovisual materials, media centers properly staffed.

Level 3: individually prescribed instruction -- carrels, film loops, slides, filmstrip with accompanying tape recorder.

Level 4: electronic equipment for computer assisted instruction, dial access equipment.

Level 5: educational technology usage in education.

A few States reflected national objectives in education such as the Right to Read, career education, and environmental education. In establishing an environmental education program, one State set six objectives:

1. By June 30, 1971, three regional environmental science conferences to be conducted to inform school districts of the urgency of developing and implementing effective environmental education programs in all schools.

2. By June 30, 1971, a draft of basic environmental concepts related to natural resources for an interdisciplinary curriculum to be available for work sessions.
3. By June 30, 1971, outdoor environmental laboratories to be established in 10 representative local education agencies where the educational staff has had some previous training in environmental education.
4. By June 30, 1971, development of a comprehensive State plan for environmental education to begin with committee action evolving from the Advisory Council to the State Department of Education.
5. By June 30, 1971, mini-workshops to be planned and implemented for teachers of five local education agencies. Agency personnel to plan and conduct the workshops to familiarize teachers with the resources available in their communities useful in teaching environmental concepts.
6. By January 15, 1971, the State department of education to help one college develop plans for offering environmental science during the summer to at least 30 classroom teachers and to students in teacher education programs throughout the school year.

As part of its Right to Read program, one State intended to strengthen the reading activities of 25 percent of its schools by the purchase of items appropriate to the local program.

Another State intended to identify for participating local education agencies types of programs which would:

1. Meet the needs of the slow learner.
2. Provide a foundation for career education which is basic to occupational pursuits.
3. Adequately provide for students who anticipate pursuing higher education programs.

In promoting experimental programs, one State encouraged selected local education agencies to develop pilot and experimental programs in the academic subject areas. Another State indicated the establishment of consultant and advisory services to assist local education agencies in planning and carrying out promising experimental activities to meet unusual instructional problems.

For social science instruction, one State intended to provide a shift from the teacher oriented textbook-lecture approach to one which involved problem-solving, critical analysis, inquiry and inductive methodology.

One State's objective was to immerse the student in those areas of industrial arts requiring active dialogue, problem-solving, and in-depth research rather than the traditional lecture method. Three laboratories were suggested to be available to all school districts. The scope and nature of these laboratories would be determined by the intent of the program. They would allow the student an opportunity to solve problems, to create, to test ideas, to experiment with materials, and to encourage observation.

Almost all States indicated that their objectives for fiscal year 1971 would continue unchanged into fiscal year 1972. Those which were going to add new objectives in fiscal year 1972 were doing so in the areas of aiding local districts in writing measurable objectives, offering increased service to districts such as inservice training and workshops for teachers, and making on-site visitation to participating school districts.

3. MANAGEMENT ACTIVITIES

States are directing increased attention to improved management of the NDEA title III program. State coordinators worked in cooperation with State department of education planning units to develop a consistent, systematic plan for more effective and efficient administration of all Federal grant programs. Several coordinators referred to the development of a written manual which outlined for the year management objectives and operational procedures in specific. Objectives were in accord with the State's priority goals; they were also usually based on a reassessment of needs for equipment and materials to strengthen instruction in the academic subjects. In fact, all reports indicate that State administrators of the NDEA title III program did a considerable amount of planning to improve the administration and operation of the program. Various planning activities may be summarized as follows:

1. A study of critical documents, regulations, guidelines, and written policies pertaining to the program from both Federal and State levels;
2. Reassessment of needs;

3. Formulation of management and program objectives;
4. Revision of administrative policies, standards for eligibility of equipment, and accounting forms;
5. Revision of forms and guidelines to facilitate the process of project applications and of project reporting;
6. Conduct of regional meetings to apprise local education agencies of such changes and revisions;
7. Formulation of office procedures and of projected workloads; and
8. Budgeting of administrative funds.

The subsequent paragraphs summarize reported management activities which relate specifically to four components of project administration: project development, project review, project monitoring, and project reporting.

Project Development

State coordinators reported various types of methods which were employed to improve the quality of local NDEA title III projects. Most frequently mentioned were the cooperative arrangements which were made with State department of education personnel, particularly with supervisors, with consultants for the academic subjects and with media specialists, to provide systematic and consistent assistance to local school districts in planning projects and in writing project applications.

Usually, States arranged regional conferences during which time general information and documents relating to project development were disseminated. A few States reported that the visual presentations, followed by discussions,

of exemplary projects which were included on conference agendas contributed to the improvement of projects. Arrangements were often made for appropriate State personnel to visit and assist local school personnel with the development of projects. However, most States reported that subject area specialists were available upon request to assist in project development.

In the development of projects, most States encouraged local education agencies to focus attention on one or more of three components: concentration on a priority need; formulation of performance objectives; and coordination with other Federal programs. Three priority needs were mentioned most frequently; namely, individualization of instruction, multi-media approach to teaching, and improvement of reading programs. NDEA title III was most frequently coordinated with title II of the Elementary and Secondary Education Act.

Many States reported that local projects were improved as a result of this planned and consistent leadership and as a result of the cooperative assistance from subject area consultants, from media specialists, and from State personnel representing other Federal programs.

Project Review

Practically all States reported that projects were reviewed by the NDEA title III administrative staff and by the appropriate subject matter consultant(s). Several States reported that other State department of education staff also reviewed projects. A few States arranged for appropriate personnel from local school districts or for specialists from

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institutions of higher education to assist State department of education staff in reviewing project applications. Many State coordinators developed special evaluation forms which were used by all reviewers. Some of these forms provided for a ranking scale to be applied to each item of a list of criteria as well as for precisely stated recommendations to improve the project.

Review procedures vary among States. The procedure followed in most States appears to be somewhat as follows: Upon receipt of project application, the NDEA title III coordinator, or a member of the administrative staff, records the date of receipt and checks the application for computational accuracy and for compliance with regulations and guidelines. If questions arise, the school district is contacted by telephone and minor adjustments are negotiated or the application returned for necessary changes to be made. After this clearance, the application is referred to the appropriate subject specialist for review and recommendations. At this point, in some States, subject area consultants contact the school district directly to negotiate changes to improve the project; in most States, the reviewer makes recommendations and returns the application to the coordinator who is responsible for final negotiations and approval.

A few States arrange for all reviews to be conducted at the same time at a central location. One State reported the following procedure: Reviewers are divided into teams, each with responsibility for those applications relating to one academic subject area. Members of the

NDEA title III administrative staff serve as coordinators of the review process, each assigned to one or more teams. These four- or five-member teams, composed of personnel from both the State education agency and the local school districts, usually consist of an administrator, a teacher, a supervisor or curriculum specialist, and the subject matter specialists. Using an evaluation form, the team reviews each application, after which ranked scores and recommendations are submitted to the NDEA title III staff for final negotiations and approval or disapproval.

An excerpt from one report is illustrative of the more sophisticated review procedures:

> Each proposal was reviewed and ranked in terms of the degree to which the needs, objectives and proposed program activities were clearly stated, and the degree to which the project gave evidence of high potential for enrichment of instruction in the academic areas....All reviewers completed the prepared evaluation forms which became part of the project file and were used for negotiating changes which strengthened the project.

Project Monitoring

All States reported that projects were monitored during regular visits to local school districts by subject matter consultants and by NDEA title III staff. Most coordinators indicated that the primary purpose of monitoring visits was to ascertain if equipment and materials were being used according to plans outlined in approved proposals and if financial records were adequate. However, many coordinators made special

efforts to assure that each visit enhanced the effectiveness of projects as well as provided evaluative information. They frequently referred to the valuable assistance given by other State supervisors and subject area consultants in this connection.

Several coordinators mentioned special reporting forms or monitoring instruments which had been developed for use by all State staff during visits. In some States, after making a visit, the supervisor sent a copy of the completed monitoring form to appropriate personnel of the local education agency and to the NDEA title III coordinator. One State reported that a review and evaluation report was prepared by the supervisor during the visit, after which a conference was held and the report signed by the appropriate local school official and by the visiting supervisor.

In a few States, the projects were visited and evaluated by an on-site team which prepared a written report. During monitoring visits, one State experimented with the use of the form developed for final project reporting. As a result, this form was revised to elicit more precise information about project objectives and accomplishments, and used subsequently by visiting supervisors and by local education agencies in submitting the final project evaluation report to the State. Another State reported that 135 pilot and special reading projects were closely monitored during the year by several members of the State department of education staff. In addition to the various reports submitted by the supervisors, a pre- and post-evaluation instrument was administered to all project participants. An analysis of these reports and of test data formed the basis for evaluation.

State coordinators and subject supervisors shared in other activities which were designed to improve local projects. Practically all coordinators referred to the conduct of, or arrangements for, inservice workshops which dealt specifically with methods to strengthen instruction in the several academic fields. References were made frequently to the fact that supervisors prepared and disseminated bibliographies, lists of newer instructional materials, and research-oriented information which related to each of the subject areas.

Project Reporting

Practically all States require a report of all projects to be submitted at the termination of the school year. Many States have developed a special reporting form, some of which are patterned after the report form prepared by the U.S. Office of Education for use by each State in submitting the annual narrative report. However, a few States have developed a more sophisticated form which elicits precise information pertaining to such project components as objectives, program activities, strategies employed to use equipment and materials more effectively, coordination with other State and Federal programs, and data which documents the extent to which each performance objective was accomplished.

Since evaluation of the effectiveness of projects is made primarily by the administrative and supervisory personnel of the local school district, States are encouraging local school districts to submit more precisely

written evaluation reports. Nevertheless, some State coordinators assemble evaluation data continuously throughout the year as a result of monitoring visits. Drawing upon interim monitoring reports and the final evaluation reports, State coordinators prepare and submit reports of selected exemplary projects to the Office of Education as a part of the annual narrative report. During the past year, Office of Education staff assembled selected reports of these exemplary projects and distributed a composite report to all State coordinators at the regional conferences held in 1971.

Several State coordinators reported that publications of exemplary projects were disseminated to State and local school personnel. Other States developed slide tape cassettes of exemplary projects which were used extensively. One State prepared an attractive pictorial brochure which depicted program contributions. The brochure was distributed widely to the educational community of the State, to all members of the U.S. Congressional delegation representing the State, and to other appropriate U.S. Senators and Representatives.

4. EVIDENCE OF ACHIEVEMENT

The nature of the program and its level of funding makes it virtually impossible to measure, with any validity, the impact of the program using student performance data. While many States urge such output measures in individual projects, none has attempted to measure impact statewide in this manner. As indicated earlier, States set objectives and reported results for the acquisition portion of the program in terms of the degree

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of attainment of quantity standards or modification of instructional techniques. The supervisory and related services portion of the program was evaluated in terms of the extent of contacts with local schools through inservice meetings and publications.

At least two States have recently developed statewide automated inventories of instructional equipment. This has enabled them to set objectives in terms of degree of attainment of quantity standards. One of these States has set dates in 1973 and 1974 and was able at this time to report only that substantial progress was being made in meeting State standards. The other State has established standards on a subject area by subject area basis. Half or less of the schools were able to meet these standards.

Lacking a reliable data base, many States reported in terms of the adequacy of instructional equipment and materials based on sampling, case studies, or the judgment of supervisors who spend a substantial amount of time in direct contact with schools. In all cases there is general agreement that there is a substantial gap between adequate and existing quantities of instructional equipment and materials. There is also general agreement that improvement is not likely due to the current financial conditions of most school systems.

Most of the objectives related to the modification of instruction were evaluated in terms of increased frequency of student use of laboratory type activities. Many State departments of education cited instances of team teaching, differentiated staffing, and individually prescribed learning activities made possible by equipment and materials obtained

through NDEA title III. Several reports included cases of enrichment activities, summer programs, and parent-community programs being enhanced through additional equipment and materials.

As was also indicated earlier, many of the objectives listed were really management objectives. In most cases the evaluation was made by giving an estimate of the percent of the activities performed, services provided, or degree of participation by local districts. Many examples of increased emphasis on evaluation in local applications, increased evidence of need, and greater assurance of teacher participation in selection of equipment and materials were offered as evidence of achievement of generally stated objectives for improvement of the program. A few reported survey-type feedback to support claims of attainment of objectives. At least two State reports contained rather sophisticated and impressive analyses of such survey data.

A substantial number of State departments of education reported significant improvements in management of the program due to earlier receipt of funds for fiscal year 1971 than in the two preceding years. In all cases they indicated that even earlier knowledge of the level of funding would permit even better management performance.

5. EXEMPLARY PROJECTS

As a part of its annual report, each State described three or more projects from local education agencies as good examples of efforts made to improve instruction through equipment and materials. Only a small sample of these projects could be used for the Office of Education report. As a result,

many projects deserving wider dissemination could not be included. Criteria applied in the selection were: (1) representation from States in all regions of the United States, (2) representation of several subjects, (3) evidence of comprehensive and innovative planning (e.g., interdisciplinary approach, multimedia application, interprogram coordination), (4) some indication of anticipated results, and (5) detail and clarity of description.

Elementary School Science

Guthrie, Oklahoma, Public Schools developed a project in elementary science to help students become better acquainted with the world around them. The areas included were conservation of land, water, and wild life.

The course was planned to impress upon young people the importance of the wise use of natural resources which are needed for the necessities, comfort, convenience, and protection of life.

Through the use of NDEA title III funds, schools were able to secure films, filmstrips, slides, and other materials to encourage the conservation of natural resources, while showing how these resources would be destroyed if methods of conservation were disregarded. Too, many outdoor experiences were made available in the course of which pupils were given assignments in each phase of conservation presented and reports required on what had been observed.

It is not easy to measure all of the benefits that have been derived from this approach to the study of science, but staff members are convinced

that the equipment and the materials provided through NDEA title III have made the course much more meaningful to the pupils who participated in it.

The Manistique, Michigan, school system has a fleet of 13 school buses, among which is a 69 passenger multipurpose audio-bus. The only one of its kind in the State, the multipurpose audio-bus was funded through NDEA title III. Installed in the rear of the bus is a console which contains six Sony cassette tape machines and a master control panel. This system provides simultaneously six science programs to each of the 69 student stations in the bus.

Schoolcraft County, in which the bus operates, encompasses an area of 1,229 square miles. Consequently, school bus routes are necessarily long and pupils must travel great distances to school. Children from the village of Germaskf located 10 miles away are transported to school in Manistique. It was for these children that the audio-bus was designed; to decrease boredom, and dropouts, to enhance the school concept, and to add a new educational experience to the school curriculum.

The bus is further used to transport 40 high school students to and from Bay de Hoc Community College in Escanaba for vocational education classes in welding and electricity. It is also brought into service for field trips and other out-of-town extracurricular activities.

From the audio-bus idea evolved an extension of the basic concept. The taped information was extended into an audiovisual learning center so

that many students beyond those served by the bus could profit through use of the material. To that end, the tape console was made portable and moved into the school building where it served as an input source to 31 student carrels. This also included the addition of a synchronized carrousel slide projector and cassette tape recorder to form an instructional system for use in the learning centers.

Secondary School Science

Twenty-four school districts in Pennsylvania participated in a project known as Pennsylvania Nuclear Science Pilot Schools. With the aid of a Beta-Gamma survey meter, radioactive warning tape and signs, a spinthariscope, a continuous diffusion cloud chamber, and a variety of additional laboratory equipment provided by NDEA title III, "Nuclear Science: A High School Course" was launched. The course syllabus and alternate test forms were constructed utilizing behavioral objectives. An achievement test will be administered on a pretest-posttest basis to students and to a statistically equivalent control group.

In order to determine any changes in student understanding of the nature and process of science, plans include utilization of The Test On Understanding Science authored by Cooley and Klopfer of Educational Testing Service.

Union High School, in the Township of Union, New Jersey, designed a project called "Environmental Education: A Total Ecological Laboratory

Approach." The purpose of this program was to establish at Union High School a total outdoor laboratory for ecology, plus related science learning and environmental study. Objectives included total awareness of the cycle of nature, dependence upon plant life, and the controls that may be exerted to preserve and improve upon conditions.

Union High School had an inner court ideally situated to provide space for the development of a protected outdoor laboratory. Activities included layout of the laboratory, acquisition of chosen plants, and placement of these in the most advantageous locations for healthy growth and aesthetic quality. All of the resources of the Vocational Education Department were correlated with the Biological Sciences Department to execute the best final product. Course offerings in the sciences were keyed to making full use of this laboratory, and the Social Studies Department, by employing the appropriate components, emphasized environmental strategies for the renewal of the biosphere.

The outdoor laboratory which covered some 18,750 square feet of inner court area was designed to represent North, South, and Central New Jersey. The topography, soil composition, rock formations, and plant and tree growth reflect what is natural to each of these sections of the State.

The first section representing Southern New Jersey, was planted with native southern specimens in their natural soil and surroundings; the second area, representing Central New Jersey, shows shade trees, shrubs and flowers, native to the central part of the State, and planted in soil found there. This section also contains a small pool where the

study of water plants can be made. The third section, which represents Northern New Jersey, contains trees, flowers, ferns, and bulbs in their natural origin.

The total ecology laboratory with all plants clearly marked and keyed to curriculum guides made possible study units covering every grade and numerous subject areas. Rock formation, insect life, tree study, weed investigation and all of the more sophisticated historical concentrations were exploited. Chemistry, Earth Science, Elementary Science, Agriculture, and Pollution Control Education have made use of the resources.

Landscape architecture and the aesthetic components of environment have been stressed in vocational education programs, and social studies focused on urban problems and solutions.

In Morgantown High School, West Virginia, a new course offering has been instituted entitled "American Minorities." One of the unique features of the course is the prerequisite of basic study in behavioral science, the rationale here being an attempt to establish some understanding of how people behave under certain given conditions, and why.

The minority course is not designed to simply list past and present contributions of groups usually placed in the minority category. Rather, "minority groups" are redefined to include women (54.3 percent of the population), the aged, the Appalachian, the American Indian, the Mexican-American, the Negro, the Puerto Rican, and the Jewish community.

The behavioral science unit of the course is very limited because of the time available. As a result, the objectives are restricted to a broad overview of some of the better known psychological theories. Students are expected to become aware of the basic premise of each of these theories and to make some judgment as to the impact they could have on the education process.

These judgments are based on readings, discussions, and experiments based on each theory. The students act not only as collectors of information, but also perform experiments to justify in their own minds the accuracy of the theories expounded.

An example of such an activity is an attempt to change the behavior of an unsuspecting teacher using nonverbal reinforcement. By offering or withholding attention at appropriate times, the teacher is "trained" to stand in a particular portion of the classroom while teaching. The design of teaching machines as they relate to educational theories is also considered to the extent that time will allow.

The introduction to behavioral science is intended to throw light on the actions of others and help students examine their own actions and feelings. It helps to explain the way they see themselves and how others may see them, and perhaps explain why they do some of the things they do. Although a basic text is used as a catalyst, it is only a small part of the hardware and software involved. Extensive use is made of the nearby university library collection of film, filmstrips, paperbacks, and pamphlets.

Upon completion of the unit in behavioral science, the class begins its study of the minority groups themselves. In keeping with the curriculum being developed, the historical contributions of a minority group are less important than the current situation. It is at this point that behavioral science becomes a tool. How would an individual in some particular minority group see himself and how would he feel others see him? Much of what takes place in the classroom on this subject is speculative but provides food for thought, not to mention the discussion it initiates.

The specific instructional objectives for the class are still being developed, causing the curriculum to be rather unstructured at the instructional level. This situation is being rectified rapidly. The classroom is also loosely structured, as intended. Discussion is the rule rather than the exception. A great deal of interest has been generated, and the course could well become a model for all of West Virginia.

Freemont Union High School District, California, organized a project entitled "Individualized Instruction in Science" for the participation of 3,500 pupils at grade levels nine through twelve.

Established as objectives of the individualized science instruction were development of the following participant abilities: (1) to plan and schedule learning experiences when given a variety of choices, (2) to measure such phenomena as length, mass, electrical charge, half-life of radioisotopes, and planetary distances within the solar system,

(3) to recognize the worth of scientific knowledge in solving current problems, (4) to recognize apparatus and explain theories of operation, and (5) to recognize the impact of science on environment. The project goal was to provide a program of relevance, individualization, and experience which would counteract decreasing enrollments in electricity courses.

Evaluation of individualized instruction was based on a firmly structured plan:

1. Given required activities and optional activities for a unit of study, all students would schedule activities individually, 2 weeks in advance;
2. Given unknowns in several types of scientific phenomena, students would be able to choose proper measuring devices and would be able to use the devices to determine to an accuracy of three significant figures the measurements of at least 8 out of 10 unknowns;
3. Given a list of 10 current problems facing modern man, students would be able to choose from the list those which are closely related to science and those for which science has no close connection, the relationships to be judged by science teachers;
4. Given several problems from outside sources and outside the school, students would be able to write a description of how scientific problem-solving techniques can be used to deal with these problems;

5. Given equipment which has been used in the laboratory, students would be able to write a description, in general terms, of theory of operation and limitations of at least 8 out of 10 pieces of apparatus;
6. Given a list of environmental problems, students would be able to write a description of how science has contributed to these problems and how science could alleviate these problems. Finally, the planning committee expected that records kept on student enrollment in elective science courses would show a significant increase.

Project outcomes demonstrated that students were able, after only a short introduction, to schedule activities 2 weeks in advance. They were able to choose proper measuring devices but did not gain enough familiarity with equipment to measure all unknowns to three significant figures. Except for political and religious activities of man, students were able to recognize close relationships of science to most current problems. They were also able to relate scientific techniques to solutions of problems such as population, shortage of energy, need for fresh water, and various types of pollution. Students were not, however, successful in understanding the theory of operation of more than 5 out of 10 pieces of scientific apparatus.

Enrollment in elective science courses has increased 100 percent from 12 to 24 sections. Currently being offered are chemistry, physics, geology-botany, bio-ecology, biology, oceanology, and physiology; only chemistry has shown a decrease in enrollment.

The conclusions drawn from the project outcomes reveal that a set of well-defined performance objectives can graphically show the feasibility of installation of a new approach to curriculum improvement and stimulation in a short period of time. The continual process-and-product evaluation of this project will be used as a pattern for other pilot projects in this district.

Science and Industrial Arts

The Hammond, Indiana, project combined several sub projects in science, minor remodeling, and industrial arts.

The major portion of the program was directed toward revising the total sciences curriculum of the school system after reorganization of the system into three levels: elementary (grades K-5), middle school (grades 6-8) and high school (grades 9-12). Science education specialists from Purdue and Indiana University helped to devise a new science program for grade and ability levels according to a sequence of science ideas. Resource material, texts, and apparatus were designed to fit the three educational levels.

Elementary school science is based upon the Resource Center as the site for activities in science. It provides facilities for use and storage of science materials not found in the conventional classroom. Middle-school science is based on the Resource Center for grade six, and departmental laboratories for grades seven and eight. Sequence of science principles is a continuation from kindergarten through grade eight. High

school science programs have been enriched in content and scope, and a 4-year program has been made available.

One of the subprojects provided equipment and materials for the new science program in grades K-12; another was minor remodeling of the science laboratories in the Donald E. Gavit Junior-Senior High School, George Rogers Clark School, and Hammond High School. In addition to the above, another subproject provided for equipment for an industrial arts shop in the newly completed Scott Middle School, where manufacturing arts, service arts, crafts, and communicative arts are taught.

Mathematics and Science

The acquisition of a time-sharing computer system through an NDEA title III project by Phoenix, Arizona, Union High School made the capability of computer extended learning a reality in the district, placing Phoenix Union among the leaders of innovative programs across the country.

Previously, a few schools in Arizona have rented terminals and time from private corporations, but such applications have been limited. Other districts have been involved in a quasi-instructional use of computers, but the projects often involved testing and record keeping rather than direct applications to student learning. The Phoenix project is unique in that students have direct access to the district-owned computer via remote terminals during the school day to extend learning in mathematical and scientific concepts. Computer extended learning as applied in the program refers to learning that occurs as a result of students using a computer to program and solve problems related to particular disciplines.

Students are the programmers. They analyze the problem, organize it into a sequence of mathematical statements, and write a program. Problems are programmed from algebra, geometry, introductory analysis, calculus, probability and statistics, biology, chemistry, and physics. Students prepare programs to store on paper tape or on the computer systems' magnetic drum. In chemistry, for example, when a student develops a program on molarity, he determines the molarity of a substance, calls for his program, inserts data, and gets immediate results. He is thus freed from time-consuming calculations and learns more mathematical concepts by programming than by performing the calculations manually.

Is the concept of computer extended learning successful? A formal evaluation has not been completed, since the project is in an embryonic stage. The enthusiasm of students, teachers, and members of the community appears to indicate success.

English

NDEA title III funds were employed in the Colonial School District in Pennsylvania to provide the equipment and training support for a mass media course producing TV programs as a classroom activity in English. Additional objectives included reinforcement of other English class activities; i.e., the study of black literature, the classics, and current literature; utilization of prepared instructional programs acquired through the Pennsylvania Department of Education, National Educational Television, commercial and educational stations in the Philadelphia area, and interdistrict exchanges of taped materials. Elective programming

will develop program series on dialects, semantics, history of the English language, dramatics, and forensics. English teachers prepared to use the necessary equipment as follows:

- Of 34 teachers, 38 percent have completed course work in ETV, 71 percent participated in workshop activities in ETV, and 62 percent completed audiovisual courses.

A project undertaken by the New Castle County Vocational-Technical School, Delaware, represents an unusual approach to English instruction. In many cases, vocational school programs operate under the premise that this school may be the end of the student's formal training. Often such programs are hampered by the lack of audiovisual equipment. Too, the student may not be afforded experience in the area of cultural enrichment -- plays, speeches, films, debates -- which contribute to the improvement of a self-image, development of aesthetic values, and cultivation of an appreciation for humanistic qualities.

The New Castle Vocational-Technical English program serves students in the tenth, eleventh and twelth grades, irrespective of whether they plan upon graduation to go directly into a technical field or on to higher education.

Among the objectives of the program, in terms of performance, are the following demonstrations of student competence:

1. to write a paragraph comparing two items.
2. to write a paragraph contrasting two items.
3. to write a news story.

4. to write a feature story.
5. to write letters of application, of complaint, of sympathy, of friendship.

The Joaquin Elementary School District of Provo, Utah, constructed a media literacy project, combining NDEA title III and ESEA title II funds. The underlying concept was development of ability to utilize media to increase competence in communication.

Procedures provided an opportunity in a language arts setting for pupils to utilize nonverbal materials and techniques to help them in communicating ideas more effectively. Cameras (slide and motion picture), sorters, previewers, visual makers, cassette recorders and players, opaque and slide projectors, and other items were used in preparation and presentation of story topics.

Program objectives were improvement of ability to:

1. organize visual materials to tell a story
2. identify critical elements in a picture
3. identify common elements in visuals - form, colors, design
4. show discrimination in selecting visuals which tell a story
5. blend visual and verbal symbols in communication
6. create visual symbols for use in communication
7. upgrade self-image through total literacy in completing an all-encompassing creative project.

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The requirement of skills in seeing, speaking, listening, and writing are all stressed in the teaching procedures, with a view to developing in the individual pupil a strong basis for logical and organized thinking.

Art, English, Industrial Arts

In Palmer High School, Massachusetts, an interdisciplinary project in art, English, and industrial arts has been underway. The objective has been to attempt to institute an educationally sound approach to an understanding of the methods of mass communication through knowledge of the processes, the possibilities, and the limitations of the media.

The project has explored visual communications, graphic arts, layout design, still photography, communications and media studies, cinematography, and offset printing.

It has attempted to raise the student's concern for higher public standards of taste, creativity, and knowledge. It has shown the interrelation of the arts, relating them to the life of the community. Hopefully, it has motivated many students, challenged the gifted, and widened the interests of the average student.

Modern Foreign Languages

The Hood Junior High School in Derry, New Hampshire, has constructed a new addition to alleviate crowded conditions. The need for double sessions was eliminated so that last year some 800 sixth through eighth grade pupils were enrolled.

The focus of the project being on modern foreign languages, having in view the hiring of an additional teacher, it was decided to have one large facility, containing a language laboratory and regular classroom with a total of 60 chairs, desks, or tables -- thus providing for a regular and a laboratory class.

Since both the administration and the French specialist wished to be innovative in the area of foreign language instruction and look to the development of an individualized program, they purchased the PIH Electronics Wireless Learning System, consisting of a monitor control device in the console and 30 positions.

This equipment is employed to reinforce classroom dialogues and exercises, and to provide additional cultural enrichment activities. The addition of a new staff member permits offering French to a greater number of students with team-teaching and a pacing component in the program.

It is one of the outstanding departments in the school and one of the outstanding junior high programs in the State.

Social Studies

Tahaxto, Massachusetts, Regional District put together an interdisciplinary project in the area of social studies to introduce students to the school as a microcosm of society. By means of the program, students have made video tapes of all aspects and activities of social importance. Following this, by applying critical analytical skills to school and town documents, the school itself was analyzed as an institution of government, and the

methods and processes through which students, as individuals, interact with their institutions were reviewed. A final evaluation of the outcome of the project will be made by students, teachers, and university personnel, and the results used to modify and revise future classes in government.

Industrial Arts

A project developed in industrial arts education at the Parkway Junior High School in Jackson, Tennessee, was a departure from the traditional drafting-woodworking program found in many junior high schools. The State Supervisor of Instruction assisted in the planning and held consultations with the architect for the design of the facility. State education agency staff and consultants worked together to structure the educational specifications; instructional materials and equipment were provided by means of a NDEA title III grant.

Through this exemplary program, students in grades 7-9 were provided with exploratory experiences in electricity-electronics, graphic arts, drafting, metals, plastics, power mechanics, and wood. The shop-laboratory layout and equipment helped students develop insight and understanding of the place of industry in our culture, discover and develop talent in technical fields, acquire technical problem-solving skills, and gain a degree of skill in the use of common tools and machines. A team of two teachers conduct the program; all children attending the school will at some time become involved. Inservice programs held in August assure the employment of current teaching methods and techniques in this well-equipped facility.

The State Supervisor of Instruction in Industrial Arts assumed responsibility for the dual function of monitoring the program and following inservice activity.

6. MATCHING PATTERNS

The majority of the States reported that local school districts were reimbursed at 50 percent of their allocation. Fourteen States reported some type of variable matching, ranging from a State which reimbursed 99 percent of all projects at less than 50 percent to another State where well over two-thirds of all projects were reimbursed at more than 50 percent.

One State reported that all local school districts were reimbursed at less than 50 percent. Another State reimbursed 99 percent of all projects at less than 50 percent, while four others reimbursed a majority of projects at less than 50 percent. Nearly all States reported that a substantial amount of additional funds was needed to fund all approvable projects submitted.

7. ANTICIPATED NEEDS FOR EQUIPMENT AND MATERIALS

Assessment of Needs

Few States reported dependence on standards developed for school media by educational organizations. More educational agencies appeared to be developing their own standards for NDEA title III equipment and materials, as well as all media, often as part of the requirements for school accreditation. With a practical approach, many of them established phases or

levels of progress. A marked change was the increased number of agencies which related their NDEA title III guidelines and standards to statewide assessments of need.

In one State, however, accrediting regulations for science were so vague that almost no school could fail to meet accreditation standards because of inadequacy of science materials and equipment. Most of the local school administrators were aware of the pitfalls of this situation and depended upon their own science supervisors or the State consultants to assess realistic needs for science instruction. At least one State consultant was able to influence curriculum selection by convincing superintendents that their teachers should be permitted to visit other school systems where model science programs were underway. His technique was adopted by other consultants, with varying success.

The most common method of assessment was on-site visits, reinforced in some cases by evaluation reports and surveys. Project applications increasingly become the vehicle for analysis of projects leading to assessment of needs. One State using this method reported:

> The anticipated statewide needs for specific types of equipment and materials considered essential in improving education in the academic subjects can be obtained from an analysis of projects submitted, emerging instructional strategies, and the impetus and guidance provided by the State Department of Education.

Trends Influencing Needs for Equipment and Materials

State education agencies showed awareness of the increasingly complex role of education. One stated:

> Advances in technology, demands for social reform, explorations in space and oceanography, and the need for continuous emphasis upon moral and spiritual values require frequent evaluation of curricula offerings and of the equipment and materials designed to assist in the learning processes. As knowledge increases in the various subject areas, new methods and techniques of instruction are developed, making new and additional equipment and materials essential.

Analysis of project applications in another State supports the premise that more schools are becoming learner-centered, emphasizing individualized instruction based on the unique learning modality of each child. An increasing number of schools are becoming involved in such emerging instructional strategies as the open school, the British Primary School, schools without walls, and open access curriculum. Consequently, it becomes apparent that the effective implementation of these strategies and the concern for the individual learner precipitates a need for tremendous diversity of resources. Appropriate multilevel and multisensory resources are needed in sufficient quantities to enhance the learner's academic success. Indications are that resources should be of a manipulative nature and readily accessible and usable by individuals.

The wide variety of types of equipment and kinds of materials requested during fiscal year 1970-71 substantiates this statement. No single type of equipment and/or material can be identified as best suited to serve the multiplicity of learning/teaching approaches. Individual projects are designed to resolve particular learner needs, requiring distinctive resources. What is universal is the criteria of diversity, quantity, and quality.

Individualized and small-group instruction, the investigation/laboratory method, innovations and flexibility in organization and instruction, programmed learning, independent study, and the interdisciplinary approach--all required support from ever-growing and changing multimedia. Requirements of materials and equipment were also changed by expanded programs, such as extension of modern foreign language instruction to elementary schools, and by new programs, such as the nationally recognized, laboratory-oriented curriculums in science.

In addition, rapid obsolescence of both equipment and materials, construction of new schools, and increased enrollments multiplied the needs. In some States at least 50 percent of the materials used in their classes in history, geography, economics, and civics were obsolete. A considerable number of schools were still trying to fulfill the basic requirements for modernizing instruction and for bringing courses up to accreditation standards, especially at elementary, middle, and junior high school levels.

A large number of districts found that achieving racial balance meant reorganization which changed the purposes of countless buildings. For example, high schools equipped for secondary level instruction were turned into elementary or intermediate schools, and likewise, elementary schools became high schools. Such reorganizations caused a "great shift of equipment from school to school" as well as an immediate need for new equipment.

Although the largest proportion of NDEA title III funds was still being expended on science, and the next largest, on reading, both subject areas still had never-ending requirements. The subject areas added more recently through Federal legislation were even poorer in resources for learning. Many schools had some projectors, films, maps, globes, and supplementary materials for various courses, but shortages of audio-visual equipment and materials were still reported to be serious. Lacking in many school districts were sufficient quantities or kinds of reference materials for teachers, production facilities for instructional materials, videotape recorders and cameras, education television, manipulative and motivational materials for various courses, computers and dial-access retrieval systems, "dry" and "wet" carrels for independent study, electronic equipment, writing and listening booths, and linguistic materials for English, reading, and foreign language study.

To provide each child with opportunities in the arts, which had long been neglected, appeared to be impossible with the limitation of funds. Still

lacking in many schools were relatively inexpensive items such as brushes, tools, molds, easels, drawing boards, and more costly items such as potter's wheels, kilns, looms, and photographic and film production equipment. Schools were struggling to obtain equipment for listening centers for music, as well as pianos, and other instruments for bands and orchestras.

Industrial arts, among the most costly of all programs, was also recently added to the NDEA title III program. Too many schools, as many as 50 percent of the junior and senior high schools in some States, were still unable to offer courses providing instruction in such areas as electronics, communications, graphic arts, construction, manufacturing, power mechanics, and transportation. Industrial arts was rarely offered in elementary schools.

Priorities established by State and local educational agencies to improve educational opportunities increased the need for larger quantities and varied kinds of media. Priorities included crash programs in reading and mathematics, early childhood education, ecology, career education, vocational rehabilitation, and drug-abuse programs. Other priorities were the special needs of such groups as the gifted, underachievers, the handicapped, the educationally and emotionally deprived, and children of ethnic groups.

Limitation and late funding of NDEA title III funds, as well as lack of matching funds in poor districts, often helped to increase the difficulties

of meeting instructional objectives related to technology and modern methods of teaching. Inflationary costs of equipment increased the amounts of funds required. Added to this was the expanding need for expensive types of equipment, such as computers and dial-access retrieval systems, television systems, and planetariums, as well as up-to-date equipment and materials for science, industrial arts, the arts, and the social studies.

One State reported that at least $10 million would be necessary to provide instruction in industrial arts throughout the State. Another stated that its entire allotment could be well spent in one large district alone. Some schools attacked the problem of cost by emphasizing library-media centers or integrated media systems, making full use of available equipment and materials. Many found, however, that "it is doubtful that in acquisition and planning objectives one can state that the objectives are met, since by the time one plateau is reached, new equipment, materials, technology, changing curriculum development, and new instructional approaches move the desired level farther ahead. For example, earlier standards which suggested equipment and materials for large group demonstration and group participation in the discovery process will not meet the needs of today's individualized approach."

8. ADMINISTRATION OF NDEA TITLE III

Expenditures for Administration

The Federal allotment for administration of the NDEA title III program amounted in fiscal year 1971 to $2 million. Of this amount, $1.4 million

(73.6 percent of the allotment) was expended by State departments of education for administration and supervisory and related services, with $527,584 carried over for expenditure in fiscal year 1972 (table 1). Federal expenditures were more than matched by State department of education expenditures of $2.7 million, providing a total of about $4.2 million for program administration. Administrative funds are used for such items as salaries of professional and clerical staff assigned to the program, for workshops and conferences dealing with instruction in the academic subjects, staff travel, office equipment, and other equipment used for State programs of supervision in the academic subjects.

Expenditures for Equipment and Materials

Federal, State, and local total expenditures in fiscal year 1971 under the NDEA title III program for equipment, materials, and minor remodeling used to strengthen instruction in the academic subjects amounted to $88.9 million (table 2). Of this amount, $87.7 million went for equipment and materials, with 1.3 percent used for minor remodeling. Equipment purchased included audiovisual equipment such as projectors, recording equipment, and television receivers and recorders, and laboratory and other equipment such as microscopes, planetariums, biological slides and models, tachistoscopes, individual reading pacers, and laboratory apparatus for physical construction of mathematical models. Materials purchased were such items as 8 and 16mm films, filmstrips, tape and disc recordings, books, maps, globes, charts, instructional games, and pamphlets and periodicals.

The Federal allotment for equipment, materials, and minor remodeling in fiscal year 1971 was $47,500,000 (table 3). A total of $40 million (84.2 percent of the allotment) was reported expended, with $7.4 million carried over for expenditure in fiscal year 1972. State and local funds used for the same purposes to match Federal expenditures amounted to $48.2 million. In addition, six States -- Georgia, Maryland, North Carolina, Ohio, South Carolina, and Tennessee -- used $632,477 from the Appalachian Regional Development Act to match NDEA title III funds.

Among the subject areas, expenditures for equipment and materials for use in natural science programs ranked first; however, the amounts expended for equipment and materials used in English and reading instruction ranked only slightly below science (table 4). Expenditures in the social sciences and industrial arts ranked third and fourth, respectively, with expenditures in the areas of arts and humanities and modern foreign languages ranking lowest.

9. LOANS TO PRIVATE NONPROFIT ELEMENTARY AND SECONDARY SCHOOLS

Loans to private nonprofit schools under NDEA III are administered directly by the U.S. Office of Education.

During fiscal year 1971, five loans were approved for elementary and secondary schools in three States, the District of Columbia, and Puerto Rico. Approximately 1,700 elementary and secondary students benefited from these loans. The total amount approved was $78,260. The distribution is shown in the following table:

State	City	School	Amount
Colorado	Denver	Beth Jacob High School	$ 6,360
District of Columbia	Washington	Georgetown Day School	6,900
Maine	Vassalboro	Oak Grove School	24,300
New York	Westport	Lewis-Wadhams School	13,700
Puerto Rico	Rio Piedras	Colegio Vendruna	27,000

Loans were for the acquisition of equipment and instructional materials and for minor remodeling in such areas as science, mathematics, modern foreign languages, history, civics, geography, and economics. Loans were used to facilitate instruction in the following subjects:

Subject	Amount	Percentage of Total
Science	$34,175	44
Mathematics	1,019	1
Modern Foreign Languages	27,000	34
History, Civics, Geography, & Economics	2,939	4
English	998	1
Reading	127	1
Industrial Arts	3,755	5
	$70,013	90

In addition to the $70,013 used for equipment, materials, and minor remodeling in the subject fields, $8,247 (10 percent of total loans) was approved for

audiovisual libraries. Of this amount, over $17,000 was used for science and mathematics equipment and materials. The balance of the funds was used to purchase audiovisual equipment and materials.

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Table 1. Federal and State funds expended for NDEA title III State administration: Fiscal y

State or other area	Federal allotment for State administration	EXPENDITURES			Federal amount as percent of allotment	Federal amount as percent of total	Federal amount carried over
		Federal	State	Total			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	$2,000,000	$1,472,518	$2,777,140	$4,249,536	73.62	34.64	$527,584
ALABAMA	34,103	34,103	49,036	83,139	100.0	41.01	-0-
ALASKA	13,333	5,154	11,688	16,842	38.65	30.60	8,179
*ARIZONA	16,785	1,962	1,962	3,924	11.68	50.0	14,823
ARKANSAS	18,278	17,559	17,559	35,118	96.06	50.0	719
CALIFORNIA	175,210	127,928	127,927	255,855	73.01	50.0	47,282
COLORADO	19,914	16,159	16,159	32,318	81.14	50.0	3,755
CONNECTICUT	26,600	26,600	34,633	61,233	100.0	43.44	-0-
DELAWARE	13,333	7,200	16,417	23,617	54.00	30.48	6,133
FLORIDA	55,120	30,398	196,874	227,272	55.14	13.37	24,722
GEORGIA	44,096	20,187	20,187	40,374	45.77	50.0	23,909
HAWAII	13,333	13,333	167,092	180,425	100.0	7.38	-0-
IDAHO	13,333	5,603	5,603	11,206	50.0	50.0	7,730
ILLINOIS	100,958	33,685	482,051	515,736	33.36	6.53	67,273
INDIANA	48,292	44,146	44,146	88,292	91.41	50.0	4,146
IOWA	25,924	25,924	55,471	81,395	100.0	31.84	-0-
KANSAS	21,550	21,545	22,984	44,529	99.97	48.38	5
KENTUCKY	30,014	30,014	60,092	90,106	100.0	33.30	-0-
LOUISIANA	37,908	34,588	34,854	69,442	91.24	49.80	3,320
*MAINE	13,333	1,239	1,239	2,478	9.29	50.00	12,094
MARYLAND	35,312	19,836	21,037	40,873	56.17	48.53	15,476
MASSACHUSETTS	48,043	43,519	43,520	87,039	90.58	49.99	4,524
MICHIGAN	85,916	75,977	220,771	296,748	88.43	25.60	9,939
MINNESOTA	36,308	8,449	17,832	26,281	23.27	32.14	27,859
MISSISSIPPI	24,110	23,356	23,355	46,711	96.87	50.00	754
MISSOURI	41,500	35,889	35,890	71,779	86.47	49.99	5,611
MONTANA	13,333	12,966	32,992	45,958	97.24	28.21	367
NEBRASKA	13,691	9,267	10,370	19,637	67.86	47.19	4,424
NEVADA	13,333	7,062	7,297	14,359	52.96	49.18	6,271
NEW HAMPSHIRE	13,333	13,333	30,445	43,778	100.0	30.45	-0-
NEW JERSEY	62,196	62,196	186,146	248,342	100.0	25.04	-0-
*NEW MEXICO	13,333	13,333	13,333	26,666	100.0	50.0	-0-
NEW YORK	154,869	107,706	145,082	252,788	69.54	42.60	47,163
NORTH CAROLINA	48,470	24,377	24,377	48,754	50.29	40.0	24,093
NORTH DAKOTA	13,333	13,333	13,786	27,119	100.0	49.16	-0-
OHIO	101,420	38,522	41,603	80,125	37.98	48.07	62,898
OKLAHOMA	22,546	22,546	23,805	46,351	100.0	48.64	-0-
OREGON	18,172	7,887	8,898	16,785	43.40	46.98	10,285
PENNSYLVANIA	103,199	103,199	103,199	206,398	100.0	50.0	-0-
RHODE ISLAND	13,333	5,711	5,711	11,422	42.83	50.0	7,622
SOUTH CAROLINA	26,671	22,072	57,179	79,251	82.75	27.85	4,599
SOUTH DAKOTA	13,333	99	99	198	0.74	50.0	13,234
TENNESSEE	36,095	36,095	38,936	75,031	100.0	48.10	-0-
TEXAS	107,680	64,876	64,982	129,858	60.24	49.95	42,804
UTAH	13,333	13,333	13,333	26,666	100.0	50.0	-0-
*VERMONT	13,333	13,333	13,333	26,666	100.0	50.0	-0-
VIRGINIA	42,922	42,763	78,138	120,901	99.62	35.37	159
WASHINGTON	30,689	29,070	29,070	58,140	94.72	50.0	1,619
*WEST VIRGINIA	16,429	16,429	16,429	32,858	100.0	50.0	-0-
WISCONSIN	40,682	39,134	39,134	78,268	96.19	50.0	1,548
WYOMING	13,333	1,126	909	2,035	8.44	55.33	12,207
*AMERICAN SAMOA	4,000	4,000	4,000	8,000	100.0	50.0	-0-
*TRUST TERRITORY	4,000	4,000	4,000	8,000	100.0	50.0	-0-
*DISTRICT OF COLUMBIA	13,333	13,333	13,333	26,666	100.0	50.0	-0-
GUAM	4,000	4,000	4,000	8,000	100.0	50.0	-0-
PUERTO RICO	19,000	18,962	20,842	39,804	100.0	47.63	38
*VIRGIN ISLANDS	4,000	4,000	4,000	8,000	100.0	50.0	-0-

*Estimated

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Table 2. Federal and State-local expenditures for materials and equipment and minor remodeling under NDEA title III: Fiscal year 1971

State or other area	Total expenditures	Equipment and materials		Minor remodeling	
		Cost	Percent	Cost	Percent
(1)	(2)	(3)	(4)	(5)	(6)
	$88,911,611	$87,763,986	98.7	$1,147,625	1.3
ALABAMA	2,287,998	2,287,998	100.0	-0-	0.0
ALASKA	155,002	155,002	100.0	-0-	0.0
ARIZONA	1,014,798	989,612	97.5	25,186	2.5
ARKANSAS	1,231,051	1,231,051	100.0	-0-	0.0
CALIFORNIA	7,486,044	7,439,560	99.4	46,484	0.6
COLORADO	1,141,057	1,136,642	99.6	4,415	0.4
CONNECTICUT	937,238	937,238	100.0	-0-	0.0
DELAWARE	196,235	196,235	100.0	-0-	0.0
FLORIDA	2,574,589	2,574,589	100.0	-0-	0.0
GEORGIA	1,942,937	1,942,937	100.0	-0-	0.0
HAWAII	782,828	782,828	100.0	-0-	0.0
IDAHO	445,958	437,526	98.1	8,432	1.9
ILLINOIS	7,362,798	7,077,466	96.1	285,332	3.9
INDIANA	2,435,666	2,416,181	99.2	19,485	0.8
IOWA	1,692,494	1,692,494	100.0	-0-	0.0
KANSAS	1,221,649	1,197,423	98.0	24,226	2.0
KENTUCKY	591,014	590,948	100.0	66	0.0
LOUISIANA	107,222	107,222	100.0	-0-	0.0
MAINE	49,498	49,498	100.0	-0-	0.0
MARYLAND	1,231,026	1,231,026	100.0	-0-	0.0
MASSACHUSETTS	2,064,821	2,063,221	99.9	1,600	0.1
MICHIGAN	5,386,053	5,249,202	97.5	136,851	2.5
MINNESOTA	2,041,497	2,041,497	100.0	-0-	0.0
MISSISSIPPI	1,185,614	1,179,350	99.5	6,264	0.5
MISSOURI	2,174,900	2,174,900	100	-0-	0.0
MONTANA	419,491	397,310	94.7	22,181	5.3
NEBRASKA	684,202	684,202	100.0	-0-	0.0
NEVADA	145,465	145,465	100.0	-0-	0.0
NEW HAMPSHIRE	75,202	75,188	100.0	14	0.0
NEW JERSEY	1,889,388	1,826,121	96.7	63,267	3.3
NEW MEXICO	180,729	180,729	100.0	-0-	0.0
NEW YORK	5,315,896	5,067,252	95.3	248,644	4.7
NORTH CAROLINA	1,350,216	1,350,216	100.0	-0-	0.0
NORTH DAKOTA	419,292	419,292	100.0	-0-	0.0
OHIO	5,120,356	5,119,443	100.0	913	0.0
OKLAHOMA	1,280,824	1,280,824	100	-0-	0.0
OREGON	1,749,756	1,747,986	99.9	1,770	0.1
PENNSYLVANIA	4,894,426	4,894,426	100.0	-0-	0.0
RHODE ISLAND	362,185	362,185	100.0	-0-	0.0
SOUTH CAROLINA	1,789,345	1,784,395	99.7	4,950	0.3
SOUTH DAKOTA	405,268	405,268	100.0	-0-	0.0
TENNESSEE	2,189,557	2,189,557	100.0	-0-	0.0
TEXAS	2,813,144	2,812,258	100.0	886	0.0
UTAH	779,993	765,492	98.1	14,501	1.9
VERMONT	64,148	63,964	99.7	184	0.3
VIRGINIA	2,169,127	2,169,127	100.0	-0-	0.0
WASHINGTON	1,490,843	1,490,843	100.0	-0-	0.0
WEST VIRGINIA	808,660	808,660	100.0	-0-	0.0
WISCONSIN	2,620,080	2,620,080	100.0	-0-	0.0
WYOMING	163,922	163,922	100.0	-0-	0.0
*AMERICAN SAMOA	100,000	100,000	-0-	-0-	0.0
TRUST TERRITORY	74,588	72,228	96.8	2,360	3.2
DISTRICT OF COLUMBIA	246,139	246,139	100.0	-0-	0.0
GUAM	100,000	100,000	100.0	-0-	0.0
PUERTO RICO	1,155,460	925,846	80.1	229,614	19.9
*VIRGIN ISLANDS	100,000	100,000	100.0	-0-	0.0
Bureau of Indian Affairs	50,000	50,000	100.0	-0-	0.0

*Estimated.

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Table 3. Sources of funds and percent of total expenditures for acquisition of equipment and materials and minor remodeling under NDEA title III: Fiscal year 1971

State or other area	Federal allotment	Total expenditures (col.4+7+9)	Federal expenditures			State-local expenditures		Appalachian Regional Development Act	
			Expenditures	Percent of allotment	Percent of total	Expenditures	Percent of total	Cost	Percent of total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	$47,500,000	$88,911,611	$40,005,613	84.22	44.99	$48,273,521	54.29	$632,477	0.72
ALABAMA	1,143,999	2,287,998	1,143,999	100.0	50.0	1,143,999	50.0	-0-	0.0
ALASKA	75,996	155,002	75,996	100.0	49.0	79,006	51.0	-0-	0.0
ARIZONA	507,399	1,014,798	507,399	100.0	50.0	507,399	50.0	-0-	0.0
ARKANSAS	610,488	1,231,051	610,488	100.0	49.6	620,563	50.4	-0-	0.0
CALIFORNIA	3,535,998	7,486,044	3,535,998	100.0	47.23	3,950,046	57.23	-0-	0.0
COLORADO	531,257	1,141,057	492,507	46.55	43.16	648,550	56.83	-0-	0.0
CONNECTICUT	464,283	937,238	464,283	100.0	49.5	472,955	50.5	-0-	0.0
DELAWARE	114,705	196,235	98,118	85.53	50.00	98,117	50.0	-0-	0.0
FLORIDA	1,475,713	2,574,589	1,287,294	87.2	50.0	1,287,295	50.0	-0-	0.0
GEORGIA	1,372,931	1,942,937	971,468	70.8	50.0	834,134	42.9	137,335	7.1
HAWAII	206,976	782,828	206,976	100.0	26.4	575,852	73.6	-0-	0.0
IDAHO	222,979	445,958	222,979	100.0	50.0	222,979	50.0	-0-	0.0
ILLINOIS	1,984,149	7,362,798	1,699,276	85.64	23.07	5,663,522	76.92	-0-	0.0
INDIANA	1,217,833	2,435,666	1,217,833	100.0	50.0	1,217,833	50.0	-0-	0.0
IOWA	659,104	1,692,494	659,104	100.0	38.94	1,033,390	61.05	-0-	0.0
*KANSAS	563,945	1,221,649	563,945	100.0	46.16	652,086	53.37	-0-	0.0
KENTUCKY	948,977	591,014	295,507	31.1	50.0	295,507	50.0	-0-	0.0
LOUISIANA	1,246,845	107,222	53,611	8.59	50.0	53,611	50.0	-0-	0.0
MAINE	265,625	49,498	24,749	9.31	50.0	24,749	50.0	-0-	0.0
MARYLAND	832,052	1,231,026	600,807	72.20	48.80	600,806	48.80	29,413	2.38
MASSACHUSETTS	987,713	2,064,821	987,713	100.0	47.8	1,077,108	52.2	-0-	0.0
MICHIGAN	2,116,053	5,386,053	2,116,053	100.0	39.28	3,270,000	60.71	-0-	0.0
MINNESOTA	987,778	2,041,497	987,778	100.0	48.4	1,053,719	51.6	-0-	0.0
MISSISSIPPI	808,793	1,185,614	592,807	73.29	50.00	592,807	50.0	-0-	0.0
MISSOURI	1,054,691	2,174,900	1,054,691	100.0	48.5	1,120,209	51.5	-0-	0.0
MONTANA	207,298	419,491	207,298	100.0	49.4	212,193	50.6	-0-	0.0
NEBRASKA	354,630	684,202	342,101	96.46	50.0	342,101	50.0	-0-	0.0
NEVADA	86,937	145,465	72,733	83.7	50.0	72,732	50.0	-0-	0.0
*NEW HAMPSHIRE	165,189	75,202	37,601	22.76	50.0	37,601	50.0	-0-	0.0
NEW JERSEY	1,188,248	1,889,388	938,783	79.00	49.68	950,605	50.31	-0-	0.0
NEW MEXICO	370,233	180,729	88,557	23.9	49.0	92,172	51.0	-0-	0.0
NEW YORK	2,657,948	5,315,896	2,657,948	100.0	50.0	2,657,948	50.0	-0-	0.0
NORTH CAROLINA	1,542,773	1,350,216	629,325	40.79	46.60	661,124	48.96	59,767	4.42
NORTH DAKOTA	196,253	419,292	196,253	100.0	46.8	223,039	53.2	-0-	0.0
OHIO	2,560,178	5,120,356	2,560,178	100.0	50.0	2,400,362	46.9	159,816	3.1
OKLAHOMA	640,709	1,280,824	640,412	99.9	50.0	640,412	50.0	-0-	0.0
OREGON	459,537	1,749,756	459,415	99.79	26.25	1,290,341	73.74	-0-	0.0
PENNSYLVANIA	2,447,213	4,894,426	2,447,213	100.0	50.0	2,447,213	50.0	-0-	0.0
RHODE ISLAND	170,886	362,185	170,886	100.0	42.2	191,299	52.8	-0-	0.0
SOUTH CAROLINA	894,682	1,789,345	755,092	84.39	42.19	918,361	51.32	115,892	6.47
SOUTH DAKOTA	206,010	405,268	160,634	78.0	39.6	244,634	60.4	-0-	0.0
TENNESSEE	1,134,525	2,189,557	1,094,779	96.49	50.0	964,524	44.0	130,254	6.0
TEXAS	3,198,198	2,813,144	1,406,572	88.0	50.0	1,406,572	50.0	-0-	0.0
UTAH	363,334	779,993	363,334	100.0	46.6	416,659	53.4	-0-	0.0
VERMONT	114,034	64,148	29,878	26.2	46.6	34,270	53.4	-0-	0.0
VIRGINIA	1,214,806	2,169,127	1,076,557	88.63	49.6	1,092,570	50.4	-0-	0.0
WASHINGTON	720,652	1,490,843	720,652	100.0	48.3	770,191	51.7	-0-	0.0
WEST VIRGINIA	524,424	808,660	404,330	77.1	50.0	404,330	50.0	-0-	0.0
WISCONSIN	1,062,970	2,620,080	1,062,970	100.0	40.6	1,557,110	59.4	-0-	0.0
WYOMING	90,759	163,922	80,616	88.81	49.17	83,306	50.82	-0-	0.0
*AMERICAN SAMOA	50,000	100,000	50,000	100.0	50.00	50,000	50.00	-0-	0.0
TRUST TERRITORY	50,000	74,588	37,294	74.6	50.0	37,294	50.0	-0-	0.0
DISTRICT OF COLUMBIA	116,292	246,139	116,292	100.0	47.24	129,847	52.75	-0-	0.0
GUAM	50,000	100,000	50,000	100.0	50.00	50,000	50.00	-0-	0.0
PUERTO RICO	625,000	1,155,460	576,531	92.24	49.89	578,929	50.10	-0-	0.0
*VIRGIN ISLANDS	50,000	100,000	50,000	100.0	50.00	50,000	50.00	-0-	0.0
Bureau of Indian Affairs	50,000	50,000	50,000	100.0	100.0	-0-	-0-	-0-	0.0

*Estimated

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Table 4. Federal and State-local funds expended for materials and equipment under NDEA title III in seven academic subject areas: Fiscal Year 1971

State or other area	Natural sciences		Mathematics		Social studies		Modern foreign languages	
(1)	Cost (2)	Percent (3)	Cost (4)	Percent (5)	Cost (6)	Percent (7)	Cost (8)	Percent (9)
	$24,846,379	28.4	$6,735,978	7.7	$12,947,943	14.8	$3,653,222	4.2
ALABAMA	379,827	25.3	158,036	6.9	332,763	14.6	42,180	1.8
ALASKA	23,104	14.9	9,620	6.2	51,605	33.3	-0-	0.0
ARIZONA	289,553	21.0	94,809	9.6	106,419	10.8	17,038	1.7
ARKANSAS	544,116	42.2	65,048	5.3	15,159	9.4	25,124	2.0
CALIFORNIA	1,710,104	23.0	933,249	12.6	923,707	12.4	507,749	6.8
COLORADO	344,790	30.3	157,228	13.8	219,854	19.4	51,377	4.5
CONNECTICUT	285,376	30.5	78,444	8.4	149,605	16.0	61,459	6.5
DELAWARE	44,125	22.5	33,708	17.2	33,173	16.9	31,250	15.9
FLORIDA	540,065	21.0	100,148	3.9	216,455	8.4	27,084	1.1
GEORGIA	485,734	25.0	213,723	11.0	349,729	18.0	38,859	2.0
HAWAII	57,739	7.4	15,521	2.0	69,315	8.8	5,264	0.7
IDAHO	86,428	19.8	20,798	4.8	63,238	14.4	8,823	2.0
ILLINOIS	1,914,080	27.0	503,973	7.1	980,721	13.9	301,515	4.3
INDIANA	730,700	30.2	82,813	3.4	241,131	10.0	255,744	10.6
IOWA	395,709	23.4	146,523	8.6	277,162	16.4	35,008	2.1
KANSAS	336,613	28.1	49,773	4.1	155,384	13.0	58,356	4.9
KENTUCKY	202,005	34.2	20,338	3.4	45,491	7.7	9,903	1.7
LOUISIANA	24,920	23.2	6,954	6.5	30,948	28.8	1,204	1.1
MAINE	19,527	39.5	786	1.6	608	1.2	2,978	6.0
MARYLAND	384,676	31.3	126,932	10.3	330,150	26.8	48,553	3.9
MASSACHUSETTS	518,725	25.1	224,856	10.9	226,949	11.0	162,844	7.9
MICHIGAN	1,712,156	32.6	235,387	4.5	1,019,759	19.4	180,794	3.5
MINNESOTA	487,698	23.9	154,101	7.6	429,667	21.0	108,124	5.3
MISSISSIPPI	458,090	38.9	78,966	6.7	200,622	17.0	9,696	0.8
MISSOURI	606,123	27.9	127,987	5.9	428,374	19.7	52,830	2.4
MONTANA	102,012	25.7	18,237	4.6	119,466	30.1	4,355	1.1
NEBRASKA	185,561	27.1	61,644	9.0	202,685	29.6	38,017	5.6
NEVADA	34,682	23.9	13,428	9.2	10,869	7.5	16,326	11.2
NEW HAMPSHIRE	21,008	27.9	1,754	2.3	7,788	10.4	25,086	33.4
NEW JERSEY	376,478	20.6	412,227	22.6	231,354	12.7	81,505	4.5
NEW MEXICO	56,029	31.0	1,997	1.1	10,921	6.1	5,990	3.3
NEW YORK	1,141,632	22.5	608,597	12.0	606,776	12.0	225,348	4.5
NORTH CAROLINA	390,083	28.9	57,374	4.3	349,905	26.0	38,350	2.8
NORTH DAKOTA	273,563	65.2	19,359	4.6	40,236	9.6	22,478	5.4
OHIO	1,162,114	22.7	327,644	6.4	716,722	14.0	225,255	4.4
OKLAHOMA	307,398	24.0	43,932	3.4	140,891	11.0	64,425	5.0
OREGON	444,698	25.4	50,041	2.9	516,047	29.5	40,532	2.3
PENNSYLVANIA	2,131,093	43.5	319,139	6.5	521,445	10.7	213,690	4.4
RHODE ISLAND	147,718	40.8	69,830	19.3	32,979	9.1	30,269	8.3
SOUTH CAROLINA	643,152	36.1	79,380	4.5	339,768	19.0	47,150	2.6
SOUTH DAKOTA	170,958	42.2	38,753	9.6	39,691	9.8	19,218	4.7
TENNESSEE	739,689	33.8	84,841	3.9	274,770	12.5	121,896	5.6
TEXAS	707,408	25.2	275,683	9.8	297,729	10.6	83,438	3.0
UTAH	271,726	35.5	39,963	5.2	165,423	21.6	20,942	2.7
VERMONT	7,873	12.3	5,963	9.3	20,864	32.6	-0-	0.0
VIRGINIA	815,758	37.6	164,339	7.6	280,241	12.9	92,081	4.3
WASHINGTON	364,331	24.4	91,878	6.2	394,736	26.5	43,061	2.9
WEST VIRGINIA	217,865	26.9	47,261	5.9	152,045	18.8	22,689	2.8
WISCONSIN	755,115	28.8	133,157	5.1	319,510	12.2	67,618	2.6
WYOMING	86,011	52.5	7,018	4.3	26,164	16.0	2,872	1.7
AMERICAN SAMOA	-0-	--	-0-	--	-0-	--	-0-	--
TRUST TERRITORY	28,616	39.6	14,416	20.0	16,228	22.5	-0-	0.0
DISTRICT OF COLUMBIA	38,605	15.7	35,987	14.6	34,625	14.1	35,710	14.5
GUAM	8,500	8.5	8,500	8.5	20,010	20.0	6,880	6.9
PUERTO RICO	474,021	51.2	39,453	4.3	45,779	4.9	-0-	0.0
*VIRGIN ISLANDS	14,285	14.3	14,285	4.3	14,285	14.3	14,285	14.3
Bureau of Indian Affairs	26,914	53.8	10,177	20.4	-0-	0.0	-0-	0.0

*Estimated.

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Table 4. Federal and State-local funds expended for materials and equipment under NDEA title III in seven academic subject areas: Fiscal year 1971 - Continued

State or other area	English and reading		Arts and humanities		Industrial arts		Total expenditures
(10)	Cost (11)	Percent (12)	Cost (13)	Percent (14)	Cost (15)	Percent (16)	Cost (17)
	$24,427,805	27.9	$4,790,857	5.5	$10,085,879	11.5	$87,488,063
ALABAMA	1,004,102	43.9	27,371	1.2	143,719	6.3	2,287,998
ALASKA	45,860	29.6	15,400	9.9	9,410	6.1	155,002
ARIZONA	398,498	40.3	8,124	0.8	156,871	15.8	989,612
ARKANSAS	481,604	39.1	-0-	0.0	-0-	00.0	1,231,051
CALIFORNIA	1,980,144	26.6	499,937	6.7	884,670	11.9	7,439,560
COLORADO	284,025	25.0	29,705	2.6	49,663	4.4	1,136,642
CONNECTICUT	280,057	29.9	67,771	7.2	14,326	1.5	937,238
DELAWARE	26,058	13.3	14,446	7.3	13,475	6.9	196,235
FLORIDA	1,532,857	59.5	60,448	2.7	88,532	3.4	2,565,589
GEORGIA	660,598	34.0	38,859	2.0	155,435	3.0	
HAWAII	557,640	71.2	28,705	3.7	48,644	6.2	782,828
IDAHO	179,074	40.9	26,491	6.1	52,674	12.0	437,526
ILLINOIS	1,847,612	26.1	-0-	0.0	1,529,565	21.6	7,077,466
INDIANA	591,867	24.5	131,526	5.5	382,400	15.8	2,416,181
IOWA	439,391	26.0	115,108	6.8	283,593	16.7	1,692,494
KANSAS	337,215	28.2	99,685	8.3	160,397	13.4	1,197,423
KENTUCKY	243,324	41.2	45,757	7.7	24,130	4.1	590,948
LOUISIANA	31,784	29.7	3,543	3.3	7,869	7.3	
MAINE	6,452	13.0	-0-	0.0	19,147	38.7	49,498
MARYLAND	267,747	21.8	-0-	0.0	72,967	5.9	1,231,025
MASSACHUSETTS	356,624	17.3	203,538	9.9	369,685	17.9	2,063,221
MICHIGAN	1,233,936	22.5	240,904	4.6	625,266	11.9	5,249,202
MINNESOTA	531,420	26.0	-0-	0.0	330,487	16.2	2,044,497
MISSISSIPPI	287,430	24.4	77,108	6.5	67,438	5.7	1,179,350
MISSOURI	551,265	25.3	186,782	8.6	221,539	10.2	2,174,900
MONTANA	101,219	25.5	-0-	0.0	52,021	13.1	397,310
NEBRASKA	170,402	24.9	-0-	0.0	25,893	3.8	684,202
NEVADA	65,519	45.0	-0-	0.0	4,641	3.2	145,465
NEW HAMPSHIRE	19,456	25.9	96	0.1	-0-	0.0	75,188
NEW JERSEY	344,186	18.8	273,680	15.0	106,691	5.8	1,826,121
NEW MEXICO	75,375	41.7	19,374	10.7	11,043	6.1	180,729
NEW YORK	1,364,905	26.9	557,449	11.0	562,545	11.1	5,067,252
NORTH CAROLINA	452,633	33.6	48,057	3.6	10,814	0.8	1,347,216
NORTH DAKOTA	43,554	11.8	-0-	0.0	14,102	3.4	419,292
OHIO	1,428,325	27.9	209,897	4.1	1,049,486	20.5	5,119,443
OKLAHOMA	512,841	40.1	153,699	12.0	57,638	4.5	1,280,824
OREGON	332,392	19.0	187,919	10.8	176,357	10.1	1,747,986
PENNSYLVANIA	795,013	16.2	342,595	7.0	571,451	11.7	4,894,426
RHODE ISLAND	51,468	14.2	-0-	0.0	29,921	8.3	362,185
SOUTH CAROLINA	603,167	33.8	43,276	2.4	28,502	1.6	1,784,395
SOUTH DAKOTA	76,937	19.0	-0-	0.0	59,711	14.7	405,268
TENNESSEE	657,390	30.0	136,535	6.2	174,436	8.0	2,189,557
TEXAS	1,078,569	38.3	209,564	7.4	159,867	5.7	2,812,258
UTAH	174,852	22.9	47,976	6.3	44,610	5.8	765,492
VERMONT	16,896	26.4	-0-	0.0	12,368	19.4	63,964
VIRGINIA	447,177	20.6	-0-	0.0	369,531	17.0	2,169,427
WASHINGTON	298,325	20.0	186,089	12.5	112,423	7.5	1,490,843
WEST VIRGINIA	252,926	31.3	80,113	9.9	35,761	4.4	808,660
WISCONSIN	601,525	23.0	319,806	12.2	423,349	16.1	2,620,080
WYOMING	38,659	23.6	-0-	0.0	3,198	1.9	163,922
AMERICAN SAMOA	-0-	--	-0-	--	-0-	--	-0-
TRUST TERRITORY	1,196	1.6	-0-	--	11,772	16.3	72,228
DISTRICT OF COLUMBIA	70,034	28.4	-0-	--	31,178	12.7	246,139
GUAM	47,560	47.5	-0-	--	8,550	8.6	100,000
PUERTO RICO	127,430	43.8	32,319	3.5	206,844	22.3	925,846
*VIRGIN ISLANDS	14,230	14.3	14,285	14.3	14,285	14.2	100,000
Bureau of Indian Affairs	1,000	2.0	6,920	13.8	4,989	10.0	50,000

*Estimated

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